Division of Transportation Investment Management
Bureau of Transit, Local Roads, Railroad & Harbors
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Madison, WI 53707-7914

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June 13, 2014

Office of the Commissioner of Railroads
610 N. Whitney Way, Room 110
PO Box 7854
Madison, WI 53708-7854

Dear Commissioner:

Project ID 4560-05-50
North Milwaukee Street, City of Plymouth
(WSOR Crossing Signals)
Sheboygan County
Crossing No. 387 094Y MP 139.51

This is a petition being filed with your office in accordance with Section 195.28 of the Wisconsin Statutes.

The Wisconsin Department of Transportation and the City of Plymouth in conjunction with a roadway reconstruction project would like to upgrade the crossing warning devices at the Plymouth Subdivision crossing of the Wisconsin and Southern Railroad Co. with North Milwaukee Street located in the City of Plymouth, Sheboygan County with a letting date of **December 9, 2014.**

The existing warning devices at the crossing consist of mast-mounted wig-wag signals with 8-inch incandescent lamp units. There is no bell. We propose the upgrade to include gated signals with 12-inch LED lamp units, an electronic bell, and bungalow with constant warning time circuitry. We recommend the southbound signal consist of a mast mounted gated automatic signals and the northbound signal include a cantilevered installation with sidelights directed toward southeasterly Western Avenue traffic and easterly Main Street traffic. To avoid blocking vehicles turning off of northerly North Milwaukee Street to northwesterly Western Avenue, we recommend the northbound gated signal be installed nearly parallel to the track using a 30' gate, see attached drawing. During construction, the existing pedestrian crossing presently located in the south east quadrant will be relocated so as to run parallel to North Milwaukee Street close enough to the upgraded south signal such that the existing separate pedestrian signal may be eliminated. The signal support posts would be installed at the standard location of 4'-3" behind the faces of curbs. Project scheduling requests a June 1, 2015 installation deadline.

The typical section of North Milwaukee Street consists of a 29-foot concrete pavement north of the crossing. The existing crossing surface is over 140 feet long and the North Milwaukee Street and track meet at an angle of about 30 degrees with a left hand forward skew. A bump out in the roadway will be provided to provide a more perpendicular

approach for bicycles at the crossing. The City of Plymouth and the railroad are arranging to remove the section of track just south of the main track.

The Department understands current rail traffic is on a as needed basis and typically is only a couple of trains per month and that future rail traffic is expected to increase. This section of track is also being used as head room for longer trains to clear the switch located approximately 800' to the south of the crossing. It is also understood by the department that train speeds range from 5 mph up to 10 mph. The 2011 daily traffic volume on N. Milwaukee Street was 2,400 vehicles. This volume may increase if North Milwaukee Street becomes a detour route during construction. The posted speed limit at the crossing is 25 mph.

We request that you conduct an investigation to determine the appropriate crossing warning devices for this crossing.

Attached for your information are the following:

1. Railroad Crossing Report
2. Crossing Plan Sheet with signal location diagram

Sincerely,

Lisa A. Stern, P.E.
Statewide Grade Crossing Safety Engineer

LAS:whl

w/Attachments

cc: Roger Schlaama – WSOR
Jared Kinziger – WisDOT NE Region

RAILROAD CROSSING REPORT

Wisconsin Department of Transportation

DT1589 4/2003 (Replaces ED705)

1. Railroad Project ID	2. Operating Railroad	
-	-	
3. Companion Construction Project ID	4. Companion Hwy Constr. Letting Date	5. Engineering ID
-	-	-
6. Road Name	7. Official DOT/AAR Crossing Number	
-	387094Y	
8. Highway Number/Town Road/Street Name	9. Railroad Subdivision and Milepost	
Milwaukee Street @ Main Street	Plymouth, 139.51	
10. County	11. Town/City/Village of	
Sheboygan	City of Plymouth	

Attach sketch of crossing including track centers, approach grades and obstructions to view of approaching trains.

EXISTING DEVICES AT CROSSING

Provide information for both approaches	Northbound/Eastbound		Southbound/Westbound		Comments
	YES	NO	YES	NO	
12. Stop Signs	☒	☐	☒	☐	
13. Cross Bucks	☐	☒	☐	☒	
14. Wig Wag Signals	☒	☐	☐	☒	
15. Flashing Light Signals	☐	☒	☒	☐	☒ 8" ☐ 12" ☒ INC ☐ LED
16. Cantilever Signals	☐	☒	☐	☒	☐ 8" ☐ 12" ☐ INC ☐ LED
17. Gates	☐	☒	☐	☒	
18. Crossing Illuminated	☐	☒	☒	☐	
19. Flagging	☐	☐	☐	☐	
20. Bell	☐	☒	☐	☒	☐ M ☐ E
21. Sidelights	☒	☐	☐	☒	For CTH C and W. Main Street
22. Stop Bar	☐	☒	☐	☒	Distance From Crossing
23. Public Road Intersection	☒	☐	☐	☒	2 rds going west 20'
24. Humped Crossing Sign	☐	☒	☐	☒	Humped north bound
25. Railroad Advance Warning Signs	☒	☐	☒	☐	Need W10-4 on CTH C, SB 225', NB 261' to signals
26. RXR Pavement Markings	☐	☒	☐	☒	
27. Advisory Speed Signs	☐	☒	☐	☒	

OTHER CROSSING INFORMATION

28. Total No. of Tracks	29. No. of Main Line Tracks	30. No. of Other Tracks	31. Angle of Crossing
2	1	1	(30 deg.) LHF ( ) RHF

32. Total No. of Lanes	33. No. of Through Lanes	34. No. of Parking Lanes	35. No. Exclusive Use Lanes	36. No. Sidewalks	37. Sidewalk Width	38. Pavement Width	39. Curb	40. Roadway Width
2	2	0	0	0		39'	☒ Y ☐ N	40'

41. Crossing Surface Type	42. Length of Existing Crossing	43. Crossing Surface Condition
Timber & Asphalt N track & Asph. S track	60'	Timebers @ rail crossing are splintered, concrete road is pitted

Average Daily	6 a.m.-6p.m. Number	6p.m.-6a.m. Number	Timetable Speed
44. Passenger Trains			MPH
45. Freight Trains	0		10 MPH
46. Switching Moves			MPH

	ADT	50. Year
47. Highway ADT (present)	?	( )
48. Highway ADT (design)		( )
49. Posted Speed Limit	25	

Stopping Sight Distances

Distances at which crossing warning devices first visible (WDV) [1] and vehicle stopping distances (VSD) from crossing based on speed [2]

51. Approach	52. WDV	53. VSD
North	500'+	187'
South	500'+	179'

Quadrant Sight Distances

View of trains from stopping distance.

54. Quadrant	Sight Distance [3]	
	55. Actual	56. Req'd
SE	162'	110'
SW	222'	110'
NE	210'	110'
NW	150'	110'

Clearing Sight Distances

View of trains at 25 feet from nearest rail.

57. Quadrant	Sight Distance [4]	
	58. Actual	59. Req'd
SE	55'	
SW	1180'	
NE	85'	
NW	85'	

SIGHT DISTANCES

60. Obstructions, Comments
SEE ATTACHED SHEET FOR DIAGRAM

61. Diagram (Label Quadrants)

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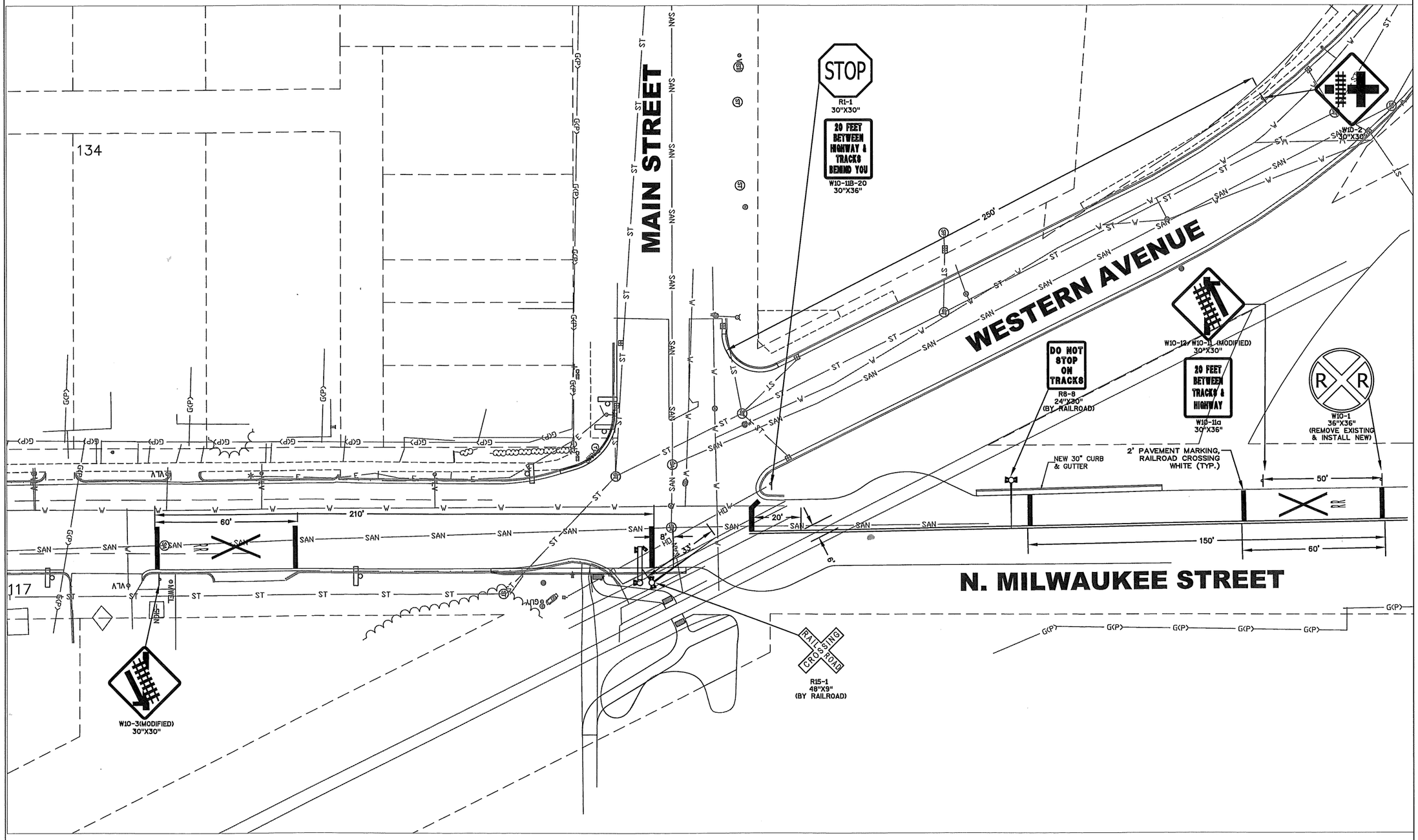
62. By	63. Title	64. Date
Andy M. Devos	Assistant Railroad Coordinator	1/31/2007



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PROJECT:
N. MILWAUKEE ST. RAILROAD CROSSING IMPROVEMENT

LOCATION:
CITY OF PLYMOUTH

CLIENT:
CITY OF PLYMOUTH WISCONSIN
Wisconsin's Heartland On the Rock

FINAL EXHIBIT

REVISIONS:

#	DATE	DESCRIPTION
1	2/20/14	WISDOT COMMENTS
2	5/13/14	WISDOT COMMENTS
3	5/27/14	WISDOT COMMENTS

NORTH ARROW:

SCALE: 1" = 10'
0 10 20

we listen. we innovate.
we turn your vision into reality.

SEAL:

SHEET:
PAVEMENT MARKING & SIGNING

PROJECT MANAGER:	DPA
PROJECT NUMBER:	XXXXX
DATE:	11/27/13

SHEET NUMBER:
3

FILENAME: S:\DOT\DOT_NE\130193 – ID 4995-00-28 N Mil St – STP-U\Design\130193_DN 2014.dwg